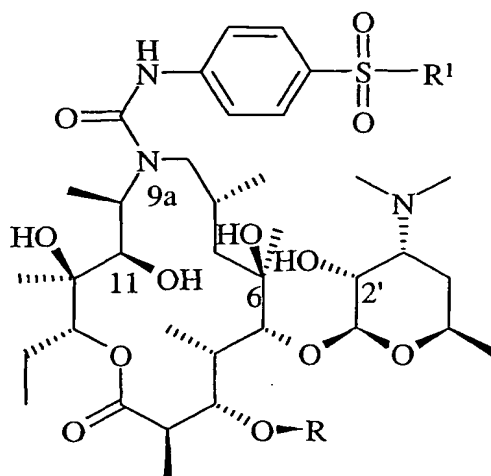


## CLAIMS

- 400 1. Substituted 9a-N-{N'-[4-(sulfonyl)phenylcarbamoyl]} derivatives of 9-deoxo-9-dihydro-9a-aza-9a-homoerithromycin A and 5-O-desosamynil-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A of the general formula 1,

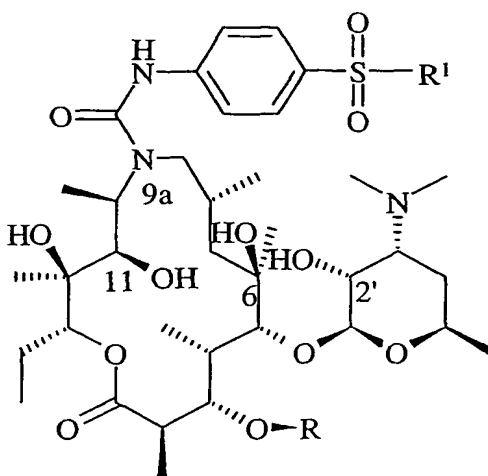


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405 wherein R represents H or cladinosyl moiety, and R<sup>1</sup> represents chloro, amino, phenylamino, 2-pyridylamino, 3,4-dimethyl-5-isoxazolylamino and 5-methyl-3-isoxazolylamino group, and pharmaceutically acceptable addition salts thereof with inorganic or organic acids.

- 410 2. A substance according to claim 1, characterized in that R<sup>1</sup> represents chloro group and R represents cladinosyl moiety.
3. A substance according to claim 1 characterized in that R<sup>1</sup> represents chloro group, and R represents H.
4. Substance according to claim 1 where R<sup>1</sup> represents amino group, and R represents cladinosyl moiety.
- 415 5. A substance according to claim 1, characterized in that R<sup>1</sup> represents phenylamino group, and R represents cladinosyl group.
6. A substance according to claim 1, characterized in that R<sup>1</sup> represents 2-pyridylamino group, and R represents cladinosyl group.

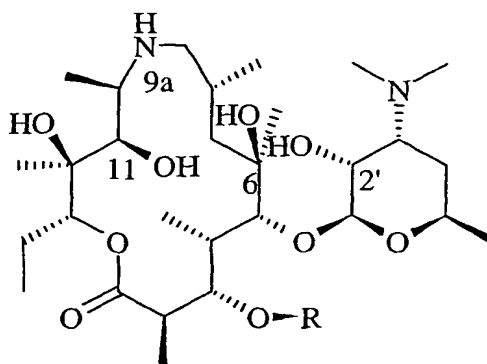
- 420 7. A substance according to claim 1, characterized in that  $R^1$  represents 3,4-dimethyl-5-isoxazolyl group, and R represents cladinosyl moiety.
8. A substance according to claim 1, characterized in that  $R^1$  represents 5-methyl-3-isoxazolylamino group, and R represents cladinosyl group.
9. A substance according to claim 1, characterized in that  $R^1$  represents amino group and R represents H.
- 425 10. A substance according to claim 1, characterized in that  $R^1$  represents phenylamino group, and R represents H.
11. A substance according to claim 1, characterized in that  $R^1$  represents 2-pyridylamino group, and R represents H.
- 430 12. A substance according to claim 1, characterized in that  $R^1$  represents 3,4-dimethyl-5-isoxazolylamino group, and R represents H.
13. A substance according to claim 1, characterized in that  $R^1$  represents 5-methyl-3-isoxazolylamino group and R represents H.
- 435 14. A process for the preparation of substituted 9a-N-{N'-[4-(sulfonyl)phenyl] carbamoyl}} derivatives of 9-deoxo-9-dihydro-9a-aza-9a-homoerithromycin A and 5-O-desosaminy-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A of the general formula 1,



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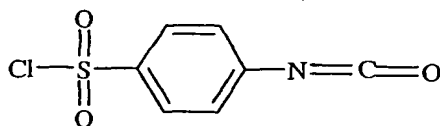
440 wherein  $R^1$  represents chloro, amino, phenylamino, 2-pyridylamnio, 3,4-dimethyl-5-isoxazolylamino and 5-methyl-3-isoxazolylamino group and R represents H or cladinosyl group, characterized in that 9a-N-{N'-[4-(chlorosulfonyl)phenyl]-

carbamoyl} derivatives of 9-deoxo-9-dihydro-9a-aza-9a-homoerithromycin A and 5-O-desosaminyl-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A general formula 1, wherein R<sup>1</sup> represents chloro group and R represent H or cladinosyl group, which can be prepared by reaction of 9-deoxo-9-dihydro-9a-aza-9a-homoerythromycin A or 5-O-desosaminyl-9-deoxo-9-dihydro-9a-aza-9a-homoerithronolide A general formula 2



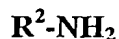
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wherein R represents H or cladinosyl group with 4-(chlorosulfonyl)phenyl isocyanate formula 3,



3

are subjected to a reaction with ammonia or amine of general formula 4,



4

wherein R<sup>2</sup> represents H or phenyl, 2-pyridyl, 3,4-dimethyl-5-isoxazolyl or 5-methyl-3-isoxazolyl group, in toluene, xylene or some other aprotic solvent, at a temperature 0-110°C and then, if appropriate, to a reaction with inorganic or organic acids.

15. Pharmaceutical composition comprising a pharmaceutically acceptable carrier and an antibacterially effective amount of the substances according to claim 1.

- 465        16. A use of a substance of according to any claims 1-13 for preparing compositions for sterilization rooms and medical instruments as well as for protection of wall and wooden coatings.